

AMENDMENT AND CLAIM LISTING

Please amend the claims as follows:

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (canceled)

Claim 7 (canceled)

Claim 8 (canceled)

Claim 9 (canceled)

Claim 10 (canceled)

Claim 11 (canceled)

Claim 12 (canceled)

Claim 13 (canceled)

Claim 14 (canceled)

Claim 15 (canceled)

Claim 16 (canceled)

Claim 17 (canceled)

Claim 18 (canceled)

Claim 19 (currently amended) 19. A method for curing a dental composite material comprising the steps of:

obtaining a curing light that includes

a power supply,

a light emitting diode (LED), said power supply being in electrical connection with said LED so that said power supply may provide electrical current to said LED, and

an elongate heat sink, said heat sink serving to draw heat away from said LED,

said elongate heat sink having a longitudinal axis,

said power supply providing electrical current to said LED in a pulsed input format of alternating periods of generally constant intensity current input to said LED followed by periods of rest with no current input to said LED,

using said pulsed electrical input to said LED to produce a light output from said LED that is in continuous wave format rather than pulsed,

said light output including light of a wavelength λ ,

said light output departing from said curing light in a direction that has an angular orientation of from about 30 to about 150 degrees with respect to said heat sink longitudinal axis,

applying said light output to a dental material to be light cured, said dental material to be cured being curable upon exposure to light of a wavelength λ ,

maintaining exposure of said dental material to be cured to said light output for a period of time sufficient to initiate curing of said dental material to be cured, and

permitting said dental material to be cured to cure;

wherein a benefit of providing pulsed electrical input to said LED is avoidance of heat buildup in said LED which would decrease intensity of light output from said LED.

Claim 20 (cancelled)

Claim 21 (previously presented) 21. A method as recited in claim 19 wherein said current is in the range of from about .25 millamps to about 2 amps.

Claim 22 (previously presented) 22. A method as recited in claim 19 wherein said current is in the range of from about 350 millamps to about 1.2 amps.

Claim 23 (previously presented) 23. A method as recited in claim 19 wherein said current is more than about 100 millamps.

Claim 24 (currently amended) 24. A method for curing a dental composite material comprising the steps of:

obtaining a curing light that includes a light emitting diode (LED),
said LED being mounted to an elongate heat sink,
said elongate heat sink having a longitudinal axis,
providing electrical current to said LED in a pulsed input format of alternating periods of generally constant intensity current input to said LED followed by periods of rest with no current input to said LED,
using said pulsed electrical input to said LED to produce a light output from said LED that is in continuous wave format rather than pulsed,
said light output including light of a wavelength λ ,
said light output departing from said LED in a direction that has an angular orientation of from about 30 to about 150 degrees with respect to said heat sink longitudinal axis,
applying said light output to a dental material to be light cured, said dental material to be cured being curable upon exposure to light of a wavelength λ ,
maintaining exposure of said dental material to be cured to said light output for a period of time sufficient to initiate curing of said dental material to be cured, and
permitting said dental material to be cured to cure;
wherein a benefit of providing pulsed electrical input to said LED is avoidance of heat buildup in said LED which would decrease intensity of light output from said LED.

Claim 25 (previously presented) 25. A method as recited in claim 24 wherein said current is more than about 100 millamps.

Claim 26 (previously presented) 26. A method as recited in claim 24 wherein said current is in the range of from about 25 millamps to about 2 amps.

Claim 27 (previously presented) 27. A method as recited in claim 24 wherein said current is in the range of from about 350 millamps to about 1.2 amps.

Please amend the specification as follows:

- [116] Figure 34c depicts a reflection cone 3408 in conjunction with LED module 3409, which is mounted on a heat sink 3910 3410 by using heat conductive adhesive 3411. One or more connection wires 3412 may be provided to power the LED module 3409. The purpose of the light reflective cone is to re-shape the light beam from the LED module to create a light footprint of desired size and density. The inner wall of the cone 3408 may be coated with a highly reflective material, such as the reflective materials mentioned elsewhere in this document. The light beam from the LED module will change its path and configuration due to being reflected by the cone 3408.